



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/745,280

12/20/2000

Monica Joshi

CISCO-2828

7727

7590

11/22/2004

David B. Ritchie
D'Alessandro & Ritchie
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER

SEFCHECK, GREGORY B

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,280

Applicant(s)

JOSHI ET AL.

Examiner

Gregory B Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 7/27/2004 is acknowledged.
- Claims 1-27 remain pending. No claims are amended.
- The drawing correction is approved. The objection to the drawings is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ross (US005394402A).

- In regards to Claims 1, 8, 13, 20, and 27,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic (Title; Abstract; Col. 2, line 57; claim 1/8/9/13/20/27 – apparatus and stored program of instructions for executing a method for isolating ports on layer 2 switch).

Referring to Fig. 1, Ross discloses configuring and maintaining VLAN designations on the plurality of ports of hub 10, thereby isolating the ports for processing only messages belonging to the designated VLAN (Col. 3, lines 14-21; claim

1/8/9/13/20/27 – means for configuring/maintaining each switch port as protected or non-protected).

Ross shows identifying destination addresses carried by messages received on one of the hub's ports and transmitting/forwarding the message to a port that matches the destination address in memory (Col. 3-4, lines 65-6; claim 1/8/9/13/20/27 – means for matching destination address on a packet received by an ingress port with a physical address/port pair in switch memory).

Ross discloses how FPE 40 functions to interact with various control and memory elements for mapping message transmissions to/from the plurality of ports 12-18 of hub 10 (Col. 5-6, lines 29-45; claim 1/8/9/13/20/27 – means for generating forwarding map for packet based on destination address on packet; claim 1/8/13/20/27 – means for sending packet to ports pursuant to forwarding map;

- In regards to Claims 2-5, 7, 9-12, 14-17, 19, 21-24, and 26,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic that covers all limitations of the parent claims. Regarding the transmission of messages, Ross discloses that messages properly matched to stored VLAN designations and destination addresses of a port are transmitted/forwarded to that port (Col. 6, lines 24-33; claim 9 – packet forwarded to destination port if paired).

Ross shows that transmission from external ports which may connect the destination is performed for messages from an internal source port having an associated VLAN designation when the destination addresses do not match a stored address/designation of any other port of the hub (Col. 4, lines 11-17; claim 9 – packet forwarded to each non-protected port if ingress is protected; claim 2/14/21 – generating comprises sending packet to each of non-protected ports if destination address is not matched with physical address and ingress port is a protected port; claim 4/11/16/23 – generating comprises allowing packet to be forwarded from protected ports to each of non-protected ports).

Messages from an internal source port not having a VLAN designation may be transmitted to all ports (Col. 1, lines 28-31; claim 9 – packet forwarded to all ports if ingress is non-protected; claim 3/15/22 – generating comprises sending packet to all ports if destination address not matched with physical address and ingress port is non-protected port; claim 5/10/17/24 – generating comprises allowing packet to be forwarded between non-protected ports; claim 7/12/19/26 – generating comprises allowing packet to be forwarded between non-protected port to each of protected ports).

- In regards to Claims 6, 18, and 25,

Ross discloses an apparatus and software-controlled program for executing a method for switching segmented LAN traffic that covers all limitations of the parent claims.

Ross shows that messages carrying a VLAN designation can not be forwarded to ports having a non-matching VLAN designation (Col. 3, lines 40-45; claim 6/18/25 – generating comprises prohibiting packet to be forwarded between each of protected ports).

Response to Arguments

3. Applicant's arguments filed 7/27/2004 have been fully considered but they are not persuasive.

- In the Remarks on pg. 10 of the Amendment, the Applicant contends that Ross does not show configuring or maintaining each switch port as protected or non-protected. Particularly, Applicant asserts on pg. 11 that equating the VLAN designations in Ross with the protected and non-protected states of the ports is not correct.
- The Examiner respectfully disagrees. The VLAN designations disclosed in Ross act to protect the ports of the hub 10 (Fig. 1) from receiving data packets that are not intended for the designated VLAN.

- In the Remarks on pgs. 11-12 of the Amendment, the Applicant contends that Ross does not show sending a data packet received on a protected ingress port to all non-protected ports when the destination address is not matched with a physical address of the switch.
- It is the Examiner's opinion that lines 11-34 of column 4 in Ross teach data messages may be received on a port having a particular VLAN designation (i.e. a protected port). Ross shows that when the destination address of the message does not match an address stored in memory of an internal port within the hub, the message is sent to the external ports having this same VLAN designation. These ports sharing the same VLAN designation as the ingress port are interpreted by the Examiner to be non-protected ports while ports having a different VLAN designation are interpreted to be protected ports. Considering states of protection/non-protection on the egress ports shown in Ross are provided by particular VLAN designations when considered in relation to the VLAN designation of the ingress port. It is in this context that VLAN designations act as "protection" or "non-protection" for the ports of the hub 10 in Fig. 1.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

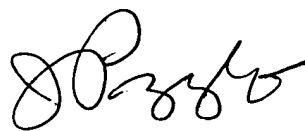
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
11-17-2004

A handwritten signature in black ink, appearing to read 'John Petzlo', with a stylized flourish at the end.

JOHN PETZLO
PRIMARY EXAMINER